

PATENT

**Marked-up Version of Amended Claims and Specification
Pursuant to 37 C.F.R. §§ 1.121(b)-(c)**

12. (Amended) A substantially pure AIB1 polypeptide comprising SEQ ID NO:8, or a conservative variant thereof, wherein the polypeptide acts as a co-activator of a steroid hormone receptor.

13. (Amended) The polypeptide of claim 12, wherein the polypeptide comprises the amino acid sequence of [SEQ. I.D. Nos.2,3,4, or 8] SEQ ID NO:4 or a conservative variant thereof.

18. (Amended) A method of identifying a candidate compound which inhibits ER-dependent transcription comprising:

contacting [the compound with an] the AIB1 polypeptide of claim 12 and an ER polypeptide with the compound and

determining the ability of the compound to interfere with the binding of the ER polypeptide with the AIB1 polypeptide.

19. (Amended) The method of claim 18, wherein the AIB polypeptide further comprises [a PAS domain] SEQ ID NO:2 or a conservative variant thereof .

20. (Amended) The method of claim 18, wherein the AIB polypeptide further comprises [a bHLH domain] SEQ ID NO:3 or a conservative variant thereof.

21. (Amended) A method of screening a candidate compound which inhibits an interaction of [an AIB1 polypeptide] a polypeptide comprising SEQ ID NO:8, or a conservative variant thereof, that acts as a co-activator of steroid hormone receptor, with an [ER] estrogen receptor polypeptide in a cell comprising:

(a) providing a cell comprising a GAL4 binding site linked to a reporter gene;

(b) providing] a GAL4 binding domain linked to either [(i) an] the AIB polypeptide or [(ii) an ER] the estrogen receptor polypeptide; and

PATENT

[(c) providing] a GAL4 transactivation domain II linked to the ER polypeptide if the GAL4 binding domain is linked to the AIB1 polypeptide or linked to the AIB1 polypeptide if the GAL4 binding domain is linked to the ER polypeptide;

(b) contacting the cell with the compound; and

([e] c) monitoring expression of the reporter gene, wherein a decrease in expression of the reporter gene in the presence of the compound compared to [that] expression of the reporter gene in the absence of the compound indicates that the compound inhibits an interaction of an AIB1 polypeptide with the ER polypeptide.

26. (Reiterated) The method of claim 21, wherein the AIB1 gene expression is measured using an AIB1 gene-specific polynucleotide probe.

27. (Reiterated) The method of claim 21, wherein the AIB1 gene expression is measured using an antibody specific for an AIB1 gene product.

55. (Amended) A substantially pure DNA comprising a sequence encoding [the AIB1 polypeptide of claim 12] a AIB1 polypeptide comprising SEQ ID NO:8, or a conservative variant thereof, wherein the polypeptide acts as co-activator of a steroid hormone receptor.

56. (Amended) The DNA of claim 55, wherein the [encoded] AIB1 polypeptide is a human AIB1 polypeptide.

57. (Amended) The DNA of claim 55, wherein the [AIB1] polypeptide comprises the amino acid sequence of [SEQ. I.D. NO.] SEQ ID NO:4.

58. (Amended) The DNA of claim 55, wherein the [AIB1] polypeptide further comprises the amino acid sequence of [SEQ. I.D. NO.] SEQ ID NO:2.

59. (Amended) The DNA of claim 55, wherein the AIB1 polypeptide further comprises the amino acid sequence of [SEQ. I.D. NO. 3] SEQ ID NO:3.

PATENT

60. (Amended) The DNA of claim 55, wherein the AIB1 polypeptide comprises the amino acid sequence of [SEQ. I.D. NO.] SEQ ID NO:8.

61. (Amended) The DNA of claim 55 comprising a polynucleotide which hybridizes at high stringency to a DNA having the sequence of [SEQ. I.D. NO. 1] SEQ ID NO:1, or the complement thereof, wherein the polynucleotide has at least 90% sequence identity to SEQ ID NO:1.

62. (Amended) The DNA of claim 55 comprising a polynucleotide sequence having at least [50%] 90% sequence identity to [SEQ. I.D. NO.] SEQ ID NO:1.

63. (Amended) The DNA of claim 55 comprising (a) the sequence of [SEQ. I.D. NO.] SEQ ID NO:1 or (b) a degenerate variant thereof.

64. (Amended) The DNA of claim 55, [wherein the DNA is operably linked to regulatory sequences for expression of the polypeptide, the regulatory sequences comprising a promoter] operably linked to a promoter.

65. (Amended) A host cell comprising the DNA of claim 55.

Please add the following new claims

--66. (New) A polypeptide comprising SEQ ID NO:2 or a conservative variant thereof.

67. (New) A polypeptide comprising SEQ ID NO:3 or a conservative variant thereof

68. (New) A polynucleotide having at least 75% homology to SEQ ID NO:1, wherein the polynucleotide encodes a polypeptide that acts as a co-activator of a steroid hormone receptor.

69. (New) A polynucleotide having at least 90% homology to SEQ ID NO:1, wherein the polynucleotide encodes a polypeptide that acts as a co-activator of a steroid hormone receptor --.